



Closed Loop Flow Control Reduces Material Usage By Up to 40%

CUSTOMER

Commercial vehicle component finisher

GRACO EQUIPMENT

ProControl 1KE Plus

CHALLENGE

With all of the moving parts on a production line, the smallest things sometimes make the biggest difference.

A commercial vehicle parts finisher had trouble getting consistent paint mil coverage. This “small thing” affected transfer efficiency and finish consistency, causing rejected parts and wasted material.

On one production line, painters manually coated parts for all terrain vehicles (ATVs) with a single-component paint or with a primer designed for hydrographic immersion printing.

- Using a traditional pump and pressure regulator, they could not keep a consistent fluid flow. Variations in paint viscosity or temperature throughout the day easily changed flow rate.
- Air pressure variations also affected quality. Some painters used too much air pressure, causing paint runs. Other painters used too little air, coating parts with not enough finish.

Quality issues with parts often required an entire line shutdown, creating unwanted downtime for as many as 15 employees.

SOLUTION

Their local Graco distributor told them about a new product. The ProControl 1KE Plus offered closed loop flow control and gun atomizing pressure control for one component materials. This system could regulate itself to stay within an ideal flow rate and pressure range.

RESULTS

The ProControl 1KE Plus made all the difference. Closed loop controls brought consistency in flow rates and better finish. After installation, they saw reductions in:

- Material usage by up to 40 percent
- Rejected part rates
- Employee downtime

“They’re running the system every day in the same booth with no issues,” said the distributor. “Seems like they’re really enjoying the feedback and the control it is giving them.”

This smart manufacturing technology also provided increased process control in these ways:

- Instant feedback on paint and solvent usage metrics for each part
- Access to up to 500 previous job logs, including date/time stamps and material usage
- A better tool for training painters in on optimal settings

“We are seeing some cost savings, and the painters seem to be more aware of how much paint they are putting on the part,” said the paint line manager. “It also seems like the under spray / paint run issues have improved as well.”



For more information, contact us at 1-800-533-9655. Visit www.graco.com/ProControl1KE.